CERES Systems Engineering Committee

Members: Maria Mitchum, NASA, DMO
Sandy Nolan, SAIC
Jill Travers, DAAC

Charter: Serve as a forum for resolving issues which affect more than one working group. Report to CERES Data Management Team

March 17, 1998 1:00 pm

The committee discussed the following system issues:

The need for the DAAC to archive and remove files from the production area has become a serious problem. The committee discussed what files were currently being archived. The committee decided that once files had been moved to the QA area at the SCF, they could be archived and removed.

The committee discussed the state of the current production schedule and made a proposed plan for a new schedule to present to Jim Kibler. The new schedule shows some products not being produced until after the CERES Science Team meeting in April.

The committee also discussed the naming convention of the gif files produced by the ERBElike PGEs. These gif files are for internal validation and are not meant to be browse images. CERES does not want to archive them. These files now get overwritten if a job for a given data date is reprocessed. Since the CERES team knows that these files will be overwritten, the committee decided to let the current naming convention stand and not imposed the standard CERES names on the gif files. If the gif files are archived at some future time, the file names can be modified in a manual mode to reflect the latest production strategy, etc.

Meeting adjourned 2:20. djt.

March 19, 1998 2:30 pm

The Systems Engineering Committee held an emergency meeting to address the very complex treatment of the manual ConfigurationCode numbers in the TRMM processing system. The team consulted with Randy Dye, a member of the DAAC Production Generation System Team and Tanya Grant, the DAAC Configuration Management (CM) system coordinator. After much discussion, it was confirmed that the Configuration Management Database Table that contains the Internal Configuration Code number (CC#in) for each Subsystem' Software and/or Constant Ancillary Data can be accessed from the production system.

The ConfigurationCode (CC# or CCode) number is a 6 digit number which is the concatenation of 2-3 digit numbers. The first three digits, CC#in, will be derived from the CM table, which tracks the internal changes within a subsystem. The last three digits will be determined at a later time, but for now will contain 3 zeros '000'.

<u>DAAC Responsibility</u>
Ms. Grant requested a few days to 'clean up' the CM Database Table. Mr. Dye has agreed to supply the

DAAC personnel the appropriate software, written in Java, to retrieve the Internal Configuration number, CC#in, depending on the Subsystem Identifier. The Internal Configuration Code number, CC#in, will then be modified to contain the 3 zero extension, hence deriving the CCode number.

The DAAC production processing personnel will write and maintain a wrapper script, using Mr. Dye's code, which will supply the appropriate Configuration Code numbers for each PGE prior to PGE instantiation into Production.

It was decided that the methodology used to provide the ConfigurationCode values to each PGE should be extended to include the SamplingStrategy and ProductionStrategy required for Production Processing. The SamplingStrategies and ProductionStrategies will be supplied from the CERES DMO through the CERES Processing Request form. The Toolkit Version will also be supplied to each PGE.

Software Developer Responsibility

Each Subsystem will create and source an environment variable script which is unique for that Subsystem. This environment variable script will set the following environment variables:

- A unique Configuration Code environment variable for the processing Subsystem and for each of the Subsystems which provide input to the processing Subsystem. The required names of these Configuration Code environment variables will be supplied to the Subsystem Leads.

- An output Sampling Strategy environment variable for the processing Subsystem and an input Sampling Strategy environment variable for each of the Subsystems which provide input to the processing Subsystem. The required names of these environment variables will be supplied to the Subsystem Leads.

- An output Production Strategy environment variable for the processing Subsystem and an input Production Strategy environment variable for each of the Subsystems which provide input to the processing Subsystem. The required names of these environment variables will be supplied to the Subsystem Leads.

- The DAAC will also provide the Toolkit version under the identifier: **TKVersion**

The SE committee has written a CERES Internal Document, 'Proposal for Semi-Automated Sampling Strategy, Production Strategy, and Configuration Code Implementation at the LaTIS System', which describes the implementation details of the this proposal. After Jill has tested this proposal, the instructions will be mailed to all persons concerned.

Meeting adjourned 4:30. mvm.